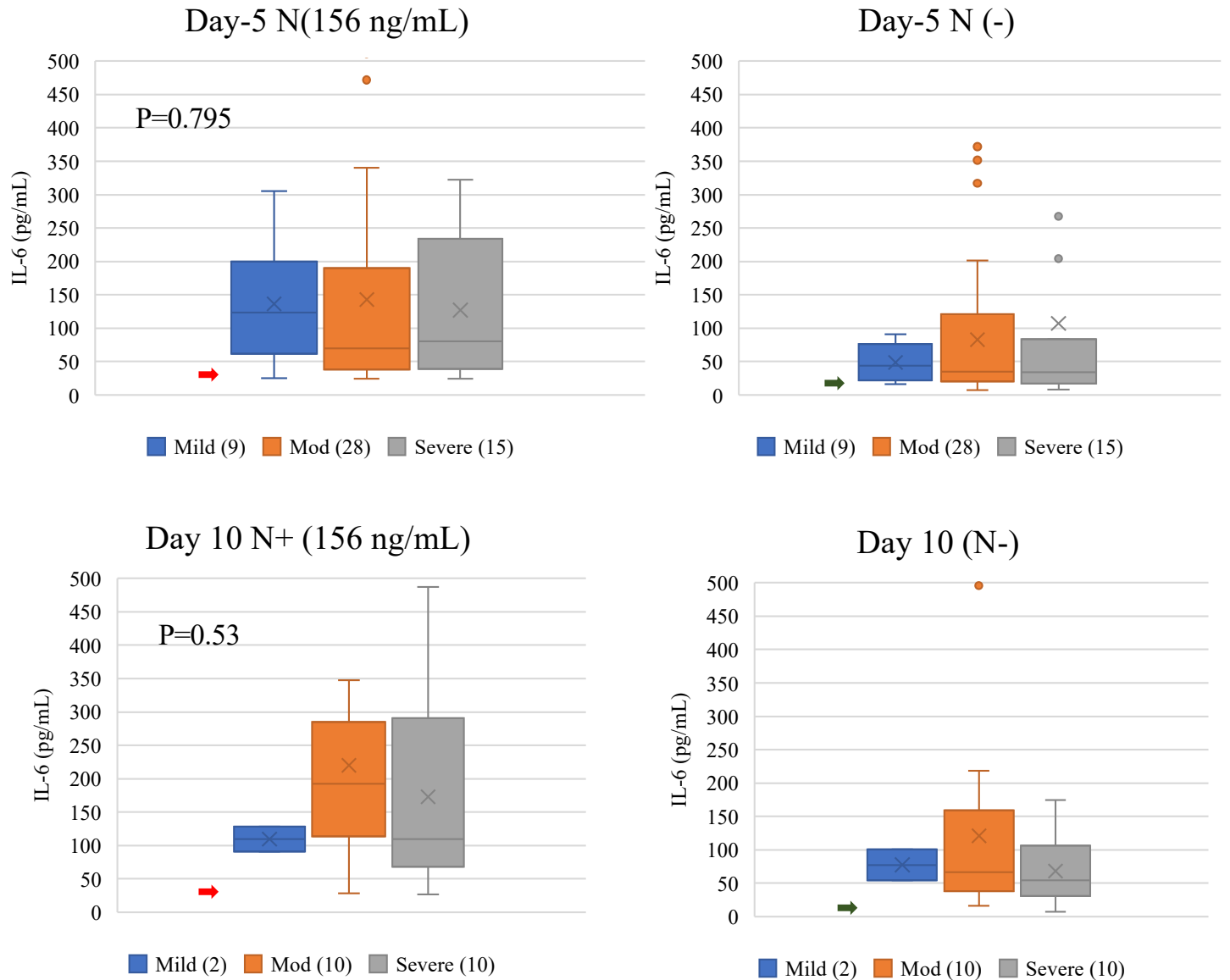
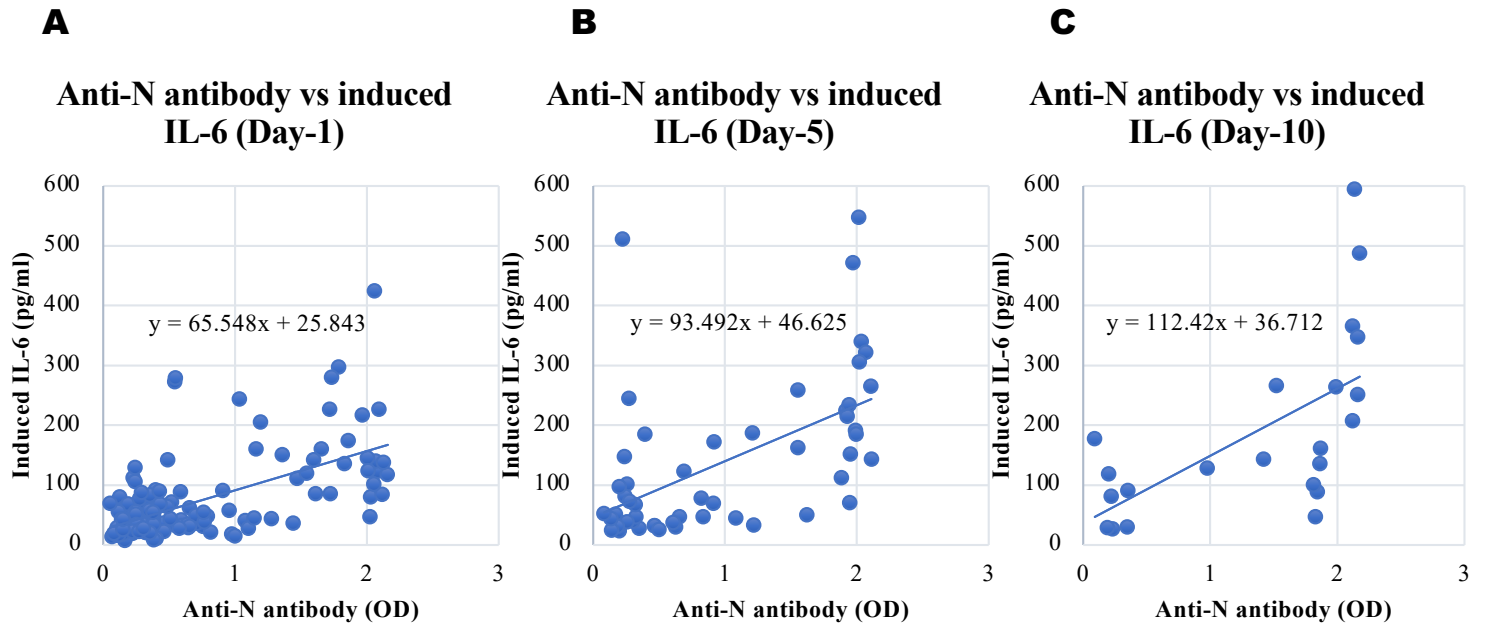


**Figure S1: Biochemical and hematological parameters at Day-1 according to diseases severity (Mild, moderate and severe).** The blue, orange and gray denote mild, moderate and severe cases, respectively. The center lines in the boxes, the boxes, and the vertical bars indicate the median, 25/75 percentiles, and 5/95 percentiles, respectively. P-values were calculated using Kruskal-Wallis H-test for three groups and are shown at the lower right of each panel. For pairwise comparison between Mild and Moderate, Moderate and Severe, and Mild and Severe cases, Mann-Whitney U test was used and results are shown above the brackets. Statistically significant results were indicated by asterisks (\*). \*, \*\*, \*\*\* indicates P<0.05, P<0.01, P<0.001, respectively. CRP: C-reactive protein, WBC: White blood cell, ALT/SGPT: Alanine aminotransferase / serum glutamic pyruvic transaminase, AST/SGOT: Aspartate aminotransferase / serum glutamic-oxaloacetic transaminase, NT-proBNP: N-terminal pro b-type natriuretic peptide. The numbers of samples tested are noted in the legend of each panel.



**Figure S2: IL-6 induction with COVID-19 serum samples collected at Day 5 and Day 10.** A total of 156 ng/mL N protein was added to K-ML2 cells to enhance IL-6 production together with 1% patients' serum. The blue, orange, and grey bars indicate mild, moderate, severe cases, respectively. The horizontal lines in the boxes, the boxes, and the vertical bars indicate the median, 25/75 percentiles, and 5/95 percentiles, respectively. The red arrow indicates IL-6 level of N protein only, and the green arrow indicates the base level of IL-6. "X" indicates the mean. The numbers of samples tested are noted in the legend of each panel. N indicates the presence of N protein, N(-) indicates the absence of N protein. The Kruskal-Wallis H-test analysis revealed that there were no significant differences among Day-5 ( $P=0.795$ ) and Day-10 ( $P=0.53$ ) samples.



**Figure S3: Comparison between anti-N antibodies and N-protein induced IL-6 levels.** Each dot's position on the X-axis represents the OD value obtained by ELISA for the anti-N antibody and its position on the Y-axis indicates N protein induced IL-6 levels. The correlation between antibody titers and induced IL-6 levels was estimated to be statistically significant (Day 1:  $R=0.57$ ,  $P<0.001$ ; Day 5:  $R=0.58$ ,  $P<0.001$ ; Day 10:  $R=0.72$ ,  $P<0.001$ ) by Spearman's test.